

What Is Claimed As New And Is Intended To Be Secured By Letters Patent Is:

1. A component of a line system of a fuel cell, comprising:

5 a) an innermost layer I, which is in contact with the conveyed fluid and is comprised of a polyester molding composition, and,

b) at least one other layer present which is selected from the group consisting of:

i) a layer II comprised of a polyamide molding composition,

10 ii) a layer III comprised of a molding composition comprised of a functionalized polyolefin,

iii) a layer IV comprised of a polyolefin molding composition in which the polyolefin is not functionalized, and

iv) a layer V comprised of an EVOH molding composition.

15 2. The component of a line system of a fuel cell as claimed in claim 1,

wherein the component is a multilayer pipe, a feed vessel, a link, an adaptor, a filter, a component of a pump, or a component of a valve.

20 3. The component of a line system of a fuel cell as claimed in claim 1, wherein the polyester molding composition is based on a polyester which is selected from the group consisting of polyethylene terephthalate, polypropylene terephthalate, polybutylene terephthalate, polyethylene 2,6-naphthalate, polypropylene 2,6-naphthalate, polybutylene 2,6-naphthalate, poly(1,4-dimethylenecyclohexane terephthalate) and poly(1,4-

25 dimethylenecyclohexane 2,6-naphthalate).

4. The component of a line system of a fuel cell as claimed in claim 3, wherein the polyester molding composition is such that when a fluid comprising water is passed over the layer, the conductivity at 90° C rises only by a maximum of 100 µS/cm.

30 5. The component of a line system of a fuel cell as claimed in claim 4, wherein the conductivity at 90° C rises only by a maximum of 50 µS/cm.

6. The component of a line system of a fuel cell as claimed in claim 1, wherein

the polyester molding composition of layer I is such that when a fluid comprising water and methanol is passed over the layer, the conductivity at 90° C rises only by a maximum of 80  $\mu$ S/cm.

5            7. The component of a line system of a fuel cell as claimed in claim 6, wherein the conductivity at 90° C rises only by a maximum of 40  $\mu$ S/cm.

8. The component of a line system of a fuel cell as claimed in claim 1, wherein the polyester molding composition comprises up to about 40 % by weight of at least one other  
10 thermoplastic.

9. The component of a line system of a fuel cell as claimed in claim 1, wherein the polyester molding composition comprises one or more additives selected from the group consisting of processing aids, nucleating agents, intercalated or exfoliated phyllosilicates,  
15 crystallization accelerators, light stabilizers, heat stabilizers, metal scavengers or complexing agents, conductivity-increasing additives, nanotubes, reinforcing additives and pigments.

10. The component of a line system of a fuel cell as claimed in claim 1, wherein the polyamide of layer II is selected from the group consisting of PA46, PA66, PA68, PA610,  
20 PA612, PA88, PA810, PA1010, PA1012, PA1212, PA6, PA7, PA8, PA9, PA10, PA11, PA12, copolyamides thereof, branched polyamine-polyamide copolymers, and mixtures thereof.

11. The component of a line system of a fuel cell as claimed in claim 1, wherein  
25 the polyamide composition of layer II contains an impact modifier of EPM or EPDM rubber having maleic anhydride units grafted thereon.

12. The component of a line system of a fuel cell as claimed in claim 1, wherein the polyamide composition of layer II contains an auxiliary or additive selected from  
30 the group consisting of plasticizers, pigments, fillers, processing aids, flame retardants glass fibers, antioxidants, UV stabilizers, and additives which impart anti-electrostatic properties or electrical conductivity to the product.

13. The component of a line system of a fuel cell as claimed in claim 12, wherein

the polyamide composition of layer II contains from 1 to 25 % by wt of a plasticizer.

14. The component of a line system of a fuel cell as claimed in claim 13, wherein the plasticizer is ethyl p-hydroxybenzoate, octyl p-hydroxybenzoate, isohexadecyl p-hydroxybenzoate, N-n-octyltoluenesulfonamide, N-n-butylbenzenesulfonamide, or N-2-ethylhexylbenzenesulfonamide.

15. The component of a line system of a fuel cell as claimed in claim 1, wherein the polyolefin of layer III or IV is a high-, medium-, or low-density linear polyethylene, LDPE, isotactic or atactic homopolypropylene, random copolymers of propene with ethene and/or 1-butene, ethylene-propylene block copolymer.

16. The component of a line system of a fuel cell as claimed in claim 1, wherein the EVOH copolymer of layer V has an ethylene monomer content of 25 to 60 mole %.

17. The component of a line system of a fuel cell as claimed in claim 1, wherein the EVOH copolymer of layer V is such that at least 60 % of the acetate groups of the copolymer are hydrolyzed.

18. The component of a line system of a fuel cell as claimed in claim 1, wherein the polyester molding composition has been rendered antielectrostatic.

19. A fuel cell system which comprises a component as claimed in claim 1.

20. A fuel cell system for the propulsion of a motor vehicle, which comprises an element as claimed in claim 1.